## 5.5 Recommendations and Conclusions

In reviewing the published literature available, national standards, and familiarity with traffic conditions in Lincoln, Nebraska, the following recommendations are made for the operation of signals during the late night hours:

- Due to the possibility of increased accidents as a result of driver and pedestrian confusion, flashing operation is <u>not</u> recommended for the City of Lincoln, Nebraska during any time period. Flashing operation should only be reserved for intersection malfunction (flashing red for all approaches) or emergency vehicle signal pre-emption (if feasible). For these reasons, many cities and jurisdictions across the country have begun abandoning operating signalized intersections with flashing operation during late night hours.
- If the intersection is semi- or fully-actuated, the intersection should be set to operate with free operation.
- For fully-actuated intersections, also consider rest-in-red operation if advance detectors are available. With advance detectors and the proper arrangement (speed sensing), this operation can reduce night-time speeding. This operation should be tested along a specific sub-system first, prior to city-wide implementation.
- Pre-timed intersections without vehicle detection should operate at a reduced cycle length. The cycle length should be determined such that pedestrian minimums are met.
- Protected left-turn phases should lead in the signal operation during late night or low volume conditions.
- In order to consider the best overnight operation, each corridor or region (downtown or suburban area) should be analyzed separately, studying traffic volumes (vehicular and truck) and accident rates.
- In developing the time period to operate late night signal timing, it is recommended to develop a consistent schedule in each area or zone.